STATEMENT OF WORK (SOW) AND SPECIFICATIONS
FOR

PHOTOVOLTAIC SYSTEM RENOVATION

AT

SAND ISLAND RANGER STATION NEAR BLUFF, UTAH

JULY 2026

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SECTION 01009

GENERAL INFORMATION AND REQUIREMENTS

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

A. Contractor shall furnish all labor, equipment, supplies, and materials to perform the following work:
   a. Replace entire existing battery bank
      i. Remove and properly dispose of existing PV system with the exception of existing mounting infrastructure unless directed otherwise by the Contracting officer or his/her designated representative
   b. Replace inverters and controls as specified
   c. Upgrade photovoltaic cells on ground array as specified
   d. Upgrade photovoltaic cells on tracker arrays as specified
   e. Assess existing fossil fuel generator and provide recommendations for restoring backup power generation capacity at the site
      i. Work will **not** include providing or installing a new fuel generator; the Government is not currently seeking to replace the existing generator.

B. **Period of Performance:** Performance period for this contract will be 30 days from Notice to Proceed.

C. **Place of Performance:** Sand Island Ranger Station near Bluff, Utah (see map below). 37.262630°, -109.612105°

D. **Access:** Contractor may access the site to the extent required to perform this work during normal working hours (Monday-Friday, 7:30 a.m. to 5:00 p.m. excluding Federal holidays).

1.2 GOVERNMENT-FURNISHED EQUIPMENT AND MATERIALS

A. The Government will provide use of the existing ground and tracker array mounting structures, and use of the existing battery shed for purposes of completing the scope of work. All other needs, including onsite power and water, shall be met by the Contractor.

1.3 PROJECT/SITE CONDITIONS

A. The site is adjacent to UT Hwy 191, a paved road, with the last 0.3 miles being a maintained dirt road for the site itself. (See location map below.)

PART 2 - PRODUCTS

2.1 PRODUCT SPECIFICATIONS

A. Product specifications will be given below in Appendices A-C.

PART 3 - EXECUTION

3.1 INSTALLATION

a. Contractor shall remove existing photovoltaic batteries, associated electrical controls, and photovoltaic panels from the existing system on site.
b. Contractor shall replace the removed items with new items in accordance with technical specifications provided in Appendices A-D below.
c. Contractor shall be responsible for disposal of all removed items. Disposal shall be conducted in accordance with all applicable local, state, and federal laws and regulations.

PART 4 - MEASUREMENT AND PAYMENT

4.1 BID SCHEDULE

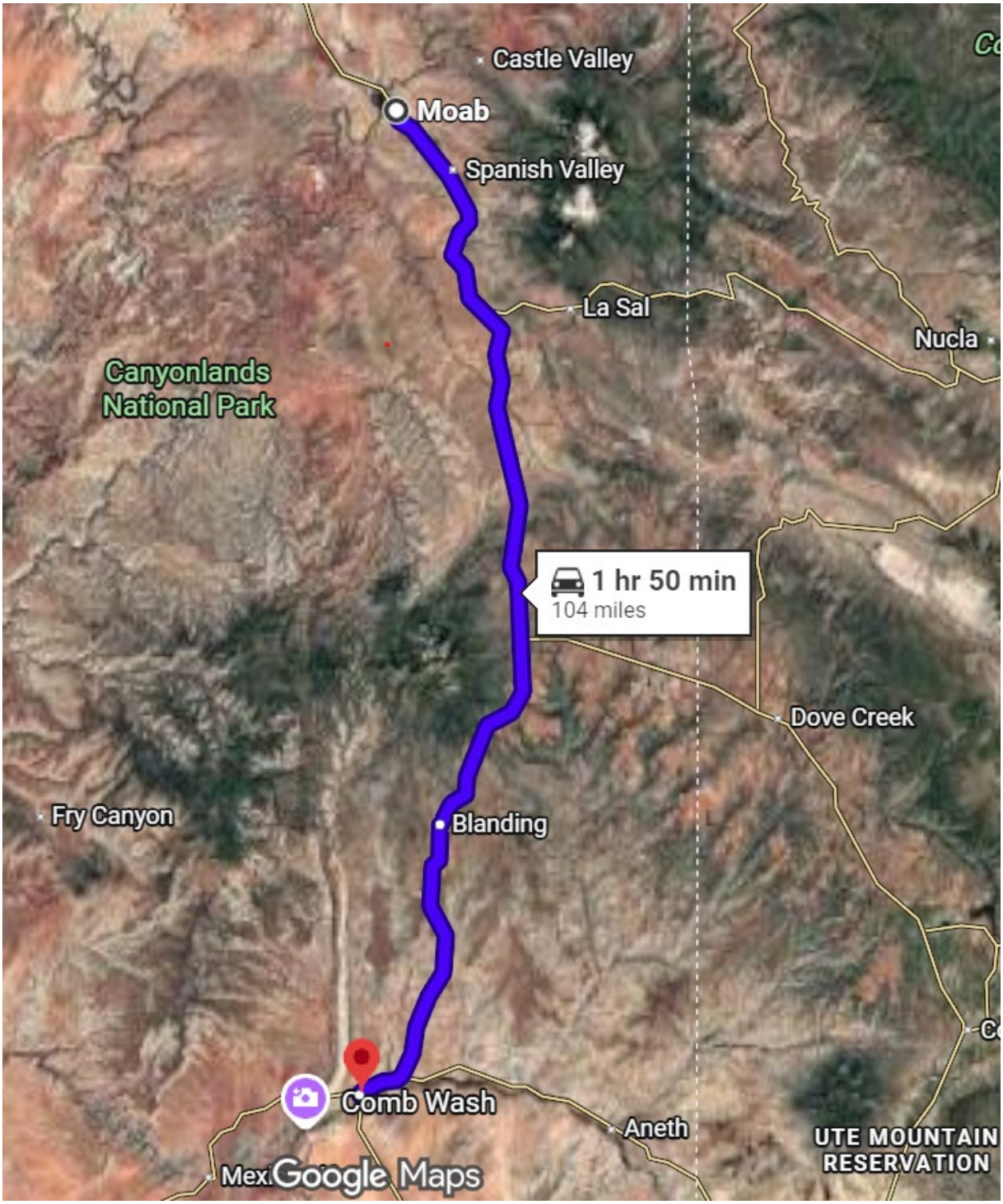
ITEM NO.	DESCRIPTION	UNIT	TOTAL QTY	UNIT COST	TOTAL COST
1	Replace battery bank	LS	1		$
2	Replace inverters and controls	LS	1		$
3	Upgrade ground-based PV array	LS	1		$
4	Upgrade tracker PV arrays	LS	1		$
5	Assess existing generator; provide recommendations	LS	1		$
			TOTAL		**$**_____

4.2 BASIS OF PAYMENT

A. Measurement of pay items shall be as listed in the bid schedules. All bid prices must include the full cost of shipping, handling, installation, and haul-off and disposal of any removed material.

END OF SECTION

Location Map



Appendices

Appendix A: Photovoltaic Batteries

- Battery system shall provide a minimum of 31 kWh
- Batteries shall be UL1973 certified
- Batteries shall be fire tested to 9540A
- Acceptable brands include Pytes, Fortress, EG4, Discover, Sol-Max, or approved equal
- Installation shall include:
    - All hardware and connectors;
    - Appropriate buswork and cabling adequate to support both the battery bank and charging system
    - All requisite mounting hardware
- Batteries to have a minimum of 20-year float design life at 25C (77F)
- Contractor shall provide full Manufactures Warranty for all parts and systems

Appendix B: Inverters and Controls

- Inverters and controls shall be appropriate and adequate to handle normal and peak loads for the installed battery bank
- Use Victron 5kW charge controllers or approved equal
- Inverter system shall include a “smart shunt” feature to provide redundancy for SOC reading
- Controls shall include a direct-current (DC) breaker system to isolate controllers and protect inverters
- Integrate inverters and controls with existing wiring system onsite
- Install automatic generator start control to operate onsite fossil-fuel generator; connection to generator may be made at a future date
- Completely integrate inverters and controls with the new battery system
- Contractor shall provide full Manufactures Warranty for all parts and systems

Appendix C: Photovoltaic Panels

- Existing system has one (1) ground mount array, and two (2) elevated “tracker” arrays
- New photovoltaic system shall (all panels on all arrays) shall provide a minimum of 4800 W
- Panels shall use bifacial technology to improve efficiency and total electrical production
- New panels shall be mounted on existing mounting infrastructure wherever practical
- Panels shall completely integrate with new batteries, inverters, and controls
- Contractor shall provide full Manufactures Warranty for all parts and systems

Appendix D: Site Photos

- The shed is a 10’x12’ shed
- The inside dimensions of the battery shed are 9’4” x 11’4”